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Dear Kami, Andy, and Heather,

Thank you for your tireless work during the Covid pandemic. Your early establishment of travel restrictions and self-isolation of travelers helped the Territory avoid what most of the world is now experiencing. Social distancing measures were prudent insurance against community spread that might have resulted from an imported case; however, three months later, concern is growing among physicians and the public about the collateral harm they are causing. With no Covid cases in the NWT for more than two months, it appears unnecessary for them to continue in addition to self-isolation of the limited number of travelers entering the Territory.

There is no risk-free approach in this pandemic; however, the balance has shifted. To date, there has been almost no harm from the Covid virus itself in the NWT. The Territory has established robust testing capability, contract tracing infrastructure, and self-isolation protocols; the population is familiar with social distancing measures should they be required in the future; and much more is known about the epidemiology of Covid. The risk of potential harm from Covid without social distancing is much lower than it was thought to be three months ago and no longer justifies the increasing harm caused by the restrictions. I would like to collaborate on shifting the focus of our response to Covid in the NWT and the message to the public.

As Andy's updates have illustrated, the Covid pandemic has been dynamic and difficult to predict. In different countries and regions, there has been:

- varied timing of viral entry,
- varied population age pyramids,
- varied entry of the virus into different population age tiers,
- varied timing and severity of social distancing measures after viral entry,
- varied timing and severity of border lockdowns after viral entry,
- varied availability of viral testing,
- varied contact tracing ability.

For almost every jurisdiction, underestimation of the true number of infections has inflated the case fatality rate:

- most infections are mild or asymptomatic,
- most people with mild disease or without symptoms are not tested,
- in most areas, testing ability has lagged significantly behind Covid spread,
- in most areas, contact tracing has lagged significantly behind Covid spread,
- the proportion of cases in different age groups varies greatly among jurisdictions.

The ratio of positive cases to number of tests performed varies fifteen-fold among countries: 1:2 in Brazil; 1:6 in Sweden; 1:10 in the US; 1:15 in Italy; 1:20 in Canada; 1:40 in Iceland; 1:250 in New Zealand.[1]

In most jurisdictions, the number of true infections is much larger than the number of confirmed cases. Jurisdictions with greater testing capability have performed more tests per positive case and have detected Covid in more people with milder symptoms: accordingly, the number of confirmed cases more accurately represents the number of true infections. In the NWT, with 500 tests per positive case, it is unlikely that there have been undetected cases.[2] In jurisdictions where testing has been used less, the true number of infections is greater than the number of reported cases - sometimes much greater. Serological testing in New York and Sweden suggests the true number of cases is 10 to 40 times higher than the number of confirmed cases.[3,4]

True case fatality rates for most jurisdictions are much lower than they appear using confirmed cases as the denominator. An exception is Singapore, which implemented extensive testing and contact tracing early. Singapore's detection of infections is likely among the most accurate in the world. Singapore has successfully restricted most Covid infections to young migrant workers, and the case fatality rate is very low: 26/42,000 cases or 0.06%.[1]

Iceland implemented extensive testing and contact tracing early. By May, they had tested 10% of their entire population – more than any other country, and they have now tested 20%. Social distancing measures halted viral spread quickly. Their detection of true infections is also likely very accurate; however, infections were distributed more equally throughout the population, including the elderly, resulting in a higher case fatality rate: 10/1822 or 0.5%.[1]

In Canada, testing capability and contact tracing has lagged behind Covid spread. Covid is rampant in seniors' facilities which have experienced a much higher mortality rate and 80% of Covid deaths in Canada overall. Our detection of true infections is highly inaccurate, and the apparent case fatality rate is markedly inflated at 8.3%.[5]

Italy and the UK were hit with Covid earlier than Canada; and testing and contact tracing lagged further behind Covid spread. The number of confirmed cases markedly underestimates the number of true cases inflating the apparent case fatality rate even further, at 14%.[1]

In Canada, 72% of Covid deaths have been in people over the age of 80, and 97% of deaths have been in people above the age of 60.[5] Using confirmed Covid cases as a denominator, the case fatality rate ranges from 0% in children to 34% in people over the age of 80. However, the true number of cases in Canada is at least ten times greater than the number of reported cases, making the true case-fatality rates one-tenth as great or lower. Older patients have more severe disease and are more likely to get tested, so the apparent case-fatality rate is closer to the true rate compared with younger patients who have milder disease and are less likely to get tested.

In Canada, 17% of the population is over the age of 65 compared with 8% of the NWT population, making the susceptibility of the NWT population to severe disease and mortality significantly less than the Canadian population as a whole.[6]

As of June 21st, the Canadian case fatality rates by age group are:

Age	Cases	Deaths	Case-fatality rate	Est. true case fatality rate
under 19:	6,982	0	0.0%	0.0%
20-39:	27,279	25	0.1%	0.005%
40-59:	30,738	228	2.7%	0.27%
60-79:	17,501	2,108	12%	2.4%
over 80:	17,730	6,070	34%.	6.8%
all:	101,019	8,410	8%	0.8%

In the initial stages of the pandemic, it was not known where Covid was being imported from, how easily the virus spread, how virulent it was, or what measures, if any, would stop its spread. Globally, most jurisdictions rapidly instituted local social distancing measures and restrictions on travelers. One hundred days later, the pandemic has evolved, and we have answers to many of these questions. It is now appropriate and advisable for jurisdictions to take individual, nuanced approaches depending on local and regional circumstances.[7]

While the pandemic was unfolding, the NWT swiftly instituted a border lockdown that limited the number of imported cases to five. Mandated self-isolation of travelers prevented community spread from those five people. While it was unclear whether more cases were coming and whether self-isolation of those entering the Territory would prevent community spread, social distancing measures were prudent insurance against the unknown. That is no longer the case. Ten weeks and more than 1000 consecutive negative tests later, it is unlikely that social distancing restrictions *within* the NWT have prevented one case of Covid. The detrimental health, social, and financial effects of social distancing are mounting, while the damage done by the Covid virus itself has been nil. A fresh look at the pandemic is warranted.

1. Entry restrictions and self-isolation of travelers have resulted in no detected cases over two months, with over 1000 negative tests.

2. Surveillance protocols for those entering the Territory have been refined and are closely managed by Public Health officials.

3. The NWT has ample testing ability for ongoing surveillance:
    a. to test entering travelers;
    b. to test anyone with Covid symptoms;
    c. to test contacts of anyone with Covid, when another case occurs.

4. The NWT has a contact tracing program that is well-resourced to react when the next imported case arrives. The NWT's small population is an advantage for effective contact tracing compared with more populous southern regions.

5. When the next case arrives, there is a well-established self-isolation protocol that people are familiar with and which can be instituted for any clandestine contacts of the index case. This will further help prevent community transmission from that case.

6. Data from Iceland, New Zealand, and B.C. demonstrate that early social distancing measures quickly suppress viral spread by reducing the R0 to less than 1.[8,9]

7. If an imported case does lead to community spread, testing and self-isolation protocols are ready to be instituted for contacts. If this does not stop spread, regional or Territory-wide social distancing measures can be reinstituted quickly (since everyone is familiar with them) and can be expected to quickly prevent further community spread.

8. Health care facilities including hospitals have had time to establish protocols and source PPE supplies to manage imported or community Covid cases should they arise.

9. Harm from Covid restrictions within the Territory is mounting on several levels:
   a. Negative impact on individuals' physical and mental health;
   b. Decreased access to social and emotional supports;
   c. Decreased access to professional and group support;
   d. Increased domestic violence;
   e. Decreased quality of education;
   f. Decreased safe shelter in schools for vulnerable children;
   g. Increased apprehensions of at-risk children;
   h. Increased substance use and related hospital admissions;
   i. Substandard palliative and acute care due to global visitor restrictions;
   j. Poorer control of chronic diseases such as diabetes and hypertension;
   k. Delayed diagnosis of cancer, infections, heart disease, diabetes, hypertension, etc.
   l. Decreased mobility of elders who are being kept at home;
   m. Increasing anxiety from fear out of proportion to the risk of being harmed by Covid;
   n. Financial stress for individuals and communities from unemployment, bankruptcies, and decreased taxes.

Having avoided an initial Covid wave, the NWT has chosen a sensible path: keep border restrictions and try to avoid Covid until Covid levels are low in other jurisdictions or there is an effective vaccine. This is the approach that New Zealand and a few other jurisdictions are taking. Key to this approach is self-isolation of travelers, which has been successful and has broad public support. However, it is becoming clear that social distancing within the Territory is no longer required.

On June 7th, having successfully suppressed community spread of Covid, New Zealand moved to Alert Level 1, removing all internal social distancing restrictions seventeen days after its last confirmed Covid case. The NWT has not had a case for more than two months and has never had community spread, yet social distancing measures remain in place. Although New Zealand has since imported several Covid cases, they remain at Alert Level 1 - prepared to re-institute social distancing measures if imported cases lead to significant community spread.

Vancouver Island experienced 135 cases of Covid before social distancing measures suppressed transmission.[10] It does not have entry restrictions or self-isolation for travelers and has more than a thousand travelers arriving daily by ferry and air from mainland B.C. and the rest of Canada. The NWT has less than one tenth as many travelers, and each traveler submits a self-isolation plan. The likelihood of importing Covid and the likelihood of it leading to community spread is markedly higher on Vancouver Island; however, they have not had a new Covid case for the past month.

As harm from social distancing restrictions within the Territory mounts, people are increasingly asking: "What are we waiting for?" Given the evidence, it is difficult to justify the 'double protection' of entry restrictions **and** social distancing. The Office of the Chief Public Health Officer is at risk of losing its credibility. Many people are ignoring restrictions that no longer make sense, instinctively appreciating that the risk from Covid is currently very low in the Territory. If social distancing restrictions are kept in place, there is a danger that people will also ignore the more focused restrictions that are important to keeping Covid out of the Territory: self-isolation by individuals entering the NWT and having NWT residents respect the self-isolation of travelers. Additionally, if and when social distancing recommendations actually do become important due to significant community Covid transmission, people will be less likely to follow them.

In the NWT, there has been almost no harm from the Covid virus itself. Social distancing measures were prudent insurance at first, but that time has passed. If significant Covid transmission arises in the Territory, those measures may again be required; however, currently, harm from social distancing far outweighs the potential harm from Covid. It is time to remove social distancing measures and accept a small risk of a traveler arriving with Covid and the even smaller risk of community spread from that case. The NWTMA suggests these recommendations.

1. Keep travel restrictions in place:
   A. minimize travel by NWT residents to areas with significant Covid;
   B. self-isolate returning/entering travelers;
   C. test symptomatic travelers; and
   D. encourage NWT residents to respect the self-isolation of travelers.

   People will understand that if these measures are not observed, there is a greater chance that an imported case will lead to community spread and social distancing measures within the Territory will need to be re-implemented.

2. Similar to New Zealand, lift social distancing restrictions within the NWT. Social gatherings should be allowed. Schools, businesses, restaurants, and sports facilities should re-open without social distancing restrictions, but with improved global public health measures. Hospital restrictions on asymptomatic visitors should be lifted.

3. Maintain and emphasize the improved Public Health measures achieved during the Covid pandemic: improved hand hygiene; frequent cleaning of common-use surfaces; encouraging people with respiratory symptoms to stay away from work, restaurants, and recreational facilities. New Zealand's Golden Rules for everyone at Alert Level 1 are appended.

4. Maintain vigilant surveillance for Covid among all travelers entering the NWT. Consider offering reduced self-isolation for people who agree to get screened for Covid – similar to

Iceland's approach with tourists.[11] Consider screening twice three days apart to compensate for the possibility of a false negative test and improve confidence a traveler does not have Covid before removing self-isolation restrictions.

5. Encourage Covid testing for NWT residents with symptoms to improve early detection of any possible community spread that might bypass travelers' self-isolation measures.

6. Prepare the public to expect the next case of Covid, giving the message that we are prepared for it and confident that it can be managed in a manner that will minimize risk to the population of the NWT. This will include self-isolation of contacts of any positive cases and may include re-instituting social distancing measures, if necessary. Emphasize that this will not be a failure of Emerging Wisely, but an expected calculated risk – one that is necessary to avoid ongoing harm from social distancing restrictions.

As Covid becomes globally endemic, the risk of importing the virus will be with us for some time - likely more than a year. Restrictions that are important for jurisdictions with a Covid burden are less relevant for more isolated areas without Covid, and the converse is true. Restrictions that make sense for England, central Ontario and Quebec do not make sense for New Zealand, PEI or the NWT.

Epidemiologically, the NWT's is an 'island' - similar to New Zealand, whose approach we should adopt. Like New Zealand, we will imported more cases of Covid. When this occurs, self-isolation by the traveler(s) with Covid will hopefully prevent community spread. However, if community transmission occurs, we can be confident that it can be suppressed with contact tracing, assiduous testing, and the re-institution of social distancing measures, if necessary. Until then, social distancing measures should be lifted and life within the NWT should return (nearly) to normal.

The NWT's geography and early quick action by Public Health have blessed the NWT with a Covid-free period. We should use it wisely to allow NWT residents to regain mental, physical, emotional, and financial strength – to build resilience for a time when social distancing measures might be needed to combat actual community spread of Covid.

Sincerely,

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